

RISE OF FINANCIAL CRIME IN MALAYSIA'S BANKING SECTOR: CRASH OF PANDEMIC COVID-19

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Abstract: *The purpose of this paper is to provide a conceptual discussion and analysis of the Covid-19 impact on financial crime in Malaysia's banking sector. The analysis is conducted to make a comparison of the financial crime in the banking sector before and after the COVID-19 pandemic occurred. This paper contextualises the impact of Covid-19 on financial crime in the banking sector in Malaysia. Moreover, this paper explores different ways of conceptualizing the COVID-19 impacts in terms of financial crimes in Malaysia's banking sector patterns based on the survey by PricewaterhouseCoopers (PWC). Global financial crimes have been made easier by the Covid-19 pandemic. According to PWC Malaysia's report on financial crime trends in Malaysia's banking sector, this study found an increasing trend in financial crime fraud, particularly cybercrime. This study implies that the banking sector must work together with the regulator to combat the risk in financial crimes. The sophisticated digitalization used in the banking sector must regularly monitor and keep up to date to minimise the occurrences of fraud, especially cybercrime.*

Keywords: *Financial crime, Banking Sector, Covid-19, Fraud*

Introduction

Coronavirus disease 2019, abbreviated COVID-19, was officially named by the World Health Organization on February 11, 2020 (CDC, 2021). Accordingly, "Coronavirus disease 2019" (COVID-19) is a disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly known as 2019-nCoV), which was first discovered in Wuhan City, Hubei Province, China, through an outbreak of respiratory illness cases (Felman, 2021). Globally, there have been over half a million deaths, and millions of people have been infected.

Recent updated report by The Organization for Economic Cooperation and Development (OECD) on the forecast released in May 2021 estimates that global economic growth will decline by 3.5 percent in 2020, compared to an earlier forecast of 6.9 percent in the case of a single-wave scenario and 7.6 percent in the case of a second wave scenario released in June 2020 (OECD, 2021). As reported in the PwC's Global Economic Crime and Fraud Survey, PwC (2022) discovered that in the recent 24 months, 46% of questioned organisations reported suffering some type of fraud or other economic crime. Similarly, to another analyst's findings, this scenario is likely to occur.

A global pandemic was predicted to cost major economies at least 2.9 percent of their GDP by 2020 if the virus spreads worldwide. This forecast has already been revised to a 4.5 percent GDP loss. With the global GDP estimated at around 87.55 trillion dollars in 2019, a 4.5 percent slowdown in economic growth would mean a loss of almost 3.94 trillion dollars (Szmigiera, 2021). Analysts believe that a global Covid-19 coronavirus pandemic would have significant negative effects on the world economy even though the exact economic impact is impossible to estimate.

Focusing on the banking sector, the Covid-19 pandemic could affect the banking sector in numerous ways. Countries that possessed excellent institutional quality and high-quality governance settings responded successfully to COVID-19, developing and implementing more effective policies and dealing more efficiently with the negative effects of the COVID-19 epidemic on the bank's performance and stability (Sabir et al., 2023). According to Beck (2020), even though the pandemic will have a negative impact on the banking sector, it is also vital for the economic recovery to take place. The crisis, on the other hand, will increase the competitive pressures on banks by accelerating trends towards digitalisation and new financial service providers. Moreover, Roxana MARCU (2021), found that the COVID-19 pandemic is altering many aspects of the banking system, including the way they operate, new operations, and procedures.

Furthermore, as a result of COVID-19, the global capital markets have experienced significant instabilities and high volatility. While the full impact has yet to be determined, it's expected that the virus' knock-on effects will continue to have a negative impact for some time. Valuation and profitability are two areas of the banking industry that are most likely to be affected disclosed by KPMG Global Banking M&A 2020 (KPMG, 2020b). Additionally, Deloitte Malaysia discovered in response to COVID-19, BNM has announced regulatory measures and MASB and IFRS have issued statements. The consequence on Malaysian Financial Institutions in terms of loan growth, earnings, provision, and liquidity will be significant (Deloitte, 2020).

Covid-19 pandemic in Malaysia's banking sector is one of the study's goals. Financial crimes in the banking sector pose several challenges and opportunities, which can be better

understood through this analysis. Moreover, it is hoped that the discussion on the implications of Covid-19 will give the banking sector a visualization to highlight the potential risks of financial crime in their organisation thus, blurt out with the possible way of solving the risks.

As a result of the pandemic, all industries around the world are now operating under a virtual paradigm. As a result of this, people have changed the way they do things and their daily routines. A brief analysis of Malaysia's financial crime designs is provided in this study, based on the PwC Malaysia survey report from 2014 to 2020. As a follow-up, a review on the role of financial services in reducing the risk of fraud would be conducted. A literature review is also conducted in order to improve the study's robustness. Through a focus on conceptual analysis and a summary of statistical reports from the Big 4, this study has a broad scope. Due to this, no empirical analysis using any statistical method is performed in this paper.

Literature Review

Covid-19 and the Opportunities of Financial Crime

The COVID-19 pandemic is unprecedented in many ways for our lifetime. We are seeing its impact on individual lives, governments, and the global economy. While cities and countries are scrambling to contain the virus and protect their citizens, they are also watching global markets decline at a breakneck speed. A large factor is the increased pressure companies, and their employees feel as they struggle to meet the challenges of a down economy. A wide range of footprints from the COVID-19 pandemic are unparalleled in our lifetimes (Abdi Kulmie et al., 2023). Individuals, governments, and the global economy are all suffering the effects.

Amongst all the huge rush by cities and regions to encompass the virus and protect their people, the world's stock markets are plummeting at an alarming rate. While struggling to keep up with a slowing economy, companies and their employees are under increased pressure. President and CEO of ACFE elucidate that it was found that most respondents said they had seen an increase in the number of frauds, and that 80% believed that fraud levels increased during economic downturns, according to the Association of Certified Fraud Examiners (ACFE) survey. Many of the factors that were present then are likely to be present today, given the historic declines in markets around the world due to the coronavirus pandemic (OECD, 2023).

Despite the fact that the year 2023 is drawing to a close, the effects of COVID-19 will be felt well into the year 2024. A growing number of survey participants have noticed an increase in fraud in the wake of COVID-19, which is in line with our previous studies on the subject. ACFE in the "fraud in the wake of covid-19: benchmarking report December 2020 edition" reported that there has been an increase in the overall level of fraud in November 2020, according to 79% of respondents (compared to 77% in August and 68 percent in May), with 38% noting that this increase has been significant (compared to 34 percent in August and 25 percent in May). 90% of our members expect this trend to continue into 2021, with 44% predicting a significant increase in fraud over the next 12 months.

On top of that, they added that several of these risks have a greater impact on organisations than others, despite the fact that respondents noted both existing and anticipated increases in each of these 12 categories. It was found that 85% of respondents had seen an increase in cyber-fraud schemes in the past year, and that 88% expect an increase over the next year.

Besides payment fraud (such as fraudulent mobile payments and credit card fraud), identity theft, and unemployment fraud, there are other significant fraud risks, both in terms of observed and expected increases in fraud (ACFE, 2023). As a result of COVID-19, major business disruptions have occurred, which executives are still addressing, while fraud opportunities have multiplied and become more difficult to detect. There are more opportunities for fraud now than there were before COVID-19 (Steenkamp, 2021).

By looking at the statistics and studies by researchers, it is clearly seen that the opportunity of fraud is significantly increase during this pandemic. People tend to commit fraud especially financial crime because they need to survive and stay thriving. Banking institutions thus need to be more focused and alert in handling their daily business transactions because they are highly exposed to this crime. Hence, banking institution need to have a proper guideline and strong internal control mechanism which suit this current pandemic issue in order for this industry to minimising the fraud occurrences.

Financial Crime & Design of Financial Crime in times of Covid-19

Throughout the world, financial crimes are becoming a more serious issue (Rebovich, 2021). For over the last 30 years, governments around the world have become increasingly concerned about financial crime. Many factors contribute to this concern, such as the fact that financial crime has different effects in different contexts (ICA, 2021). Financial crimes denote as any act or attempt to circumvent or break any laws related to money laundering and terrorist financing, as well as bribery, corruption, tax fraud, evasion of economic or trade sanctions (Insider, 2020).

Additionally, it is also referred to as criminal acts committed by an individual or a group to gain a financial or professional advantage and the economic gain is the primary motivation for such crimes (Europol, 2020). This financial crime can be classified into few categories. For instance, financial crime includes bribery and corruption, fraud, tax evasion, identity theft, cybercrime, money laundering, terrorist financing, and insider trading (ACCA, 2021). Fraud is a crime to deceive others in order to obtain an illegal gain at other people's expense according to International Standard on Auditing 240 (2001).

People have committed fraud because they are under financial strain or because they are motivated by financial difficulties, regardless of the risk implicated (Sanusi et al., 2015). The opportunity to perpetrate fraud is the second reason for someone to commit fraud. Individuals who ascend the higher positions are given more responsibility, but at the same time flawed internal controls allow fraudsters to defraud their respective organisations. There's also rationalisation. There are many reasons why committing fraud is acceptable, and rationalisation refers to justifying this behaviour by coming up with a rationale.

As a result of the lockdown, fraudsters will have a greater opportunity to exploit banking institution vulnerabilities and commit financial crimes. As more and more people go online, online scammers have new and, in some cases, more nave victims to prey on (Crisanto & Prenio, 2020). Similar outcomes report from Congressional Research Service Insight, by Liana W. Rosen (2020), as reported by the Financial Action Task Force (FATF), an intergovernmental standard-setting body for anti-money laundering (AML) and counter-financing of terrorism (CFT), the pandemic has contributed significantly to changes in the financial behaviour of governments, companies and individuals in many areas of the world, thus increasing the opportunity of financial crimes.

Consistently, the COVID-19 crisis poses the greatest financial crime risk because of the potential for money laundering, particularly fraud. Possibilities for cyber-enabled criminals to commit crimes have expanded as a result. There has been a significant increase in the number of cases of COVID-19 fraud as a result of this pandemic. Moreover, the pandemic has provided criminals with new opportunities to prey on vulnerable populations, such as the unemployed or those who are easily exploited via the internet. As a result of the increased online activity during the pandemic, cybercriminals now have more opportunities to target individuals and businesses (Liana W. Rosen, 2020).

As reported by Crisanto & Prenio (2020), data indicates that the number of cyber threats related to Covid-19 is rising. For example, a cyber security firm, Carbon Black (2020), found that ransomware attacks increased by 148% in March 2020 compared to February 2020 baseline levels. Among all industries, the financial sector has seen a 38 percent increase in cyberattacks on financial institutions. Similarly, the Financial Services Information Sharing and Analysis Center (2020) identified over 1,500 high-risk domains (i.e., those likely to have been set up by threat actors) created on or after January 1, 2020, with both a Covid-19 and financial theme. From the report, it was clearly shown that the banking sector is in a high risk because this industry had been targeted by fraudster to conduct their illicit crime.

Malaysia perspectives

This analysis of financial crime patterns in Malaysia draws upon data collected in a PWC survey conducted between 2014 and 2020. Reports from 2014 to 2020 by PwC show that fraud trend is increasing. Everything from 2014 onwards indicates the survey was conducted in the previous year. From 2013 to 2019, PwC conducted a fraud survey every two years. As a result, the report published in 2020 corresponded to the survey conducted from 30 August to 7 October of 2019. According to PwC's Fraud Survey Report, researchers can use it as a guide to analyse the patterns of financial crimes and regulatory compliance levels amongst Malaysian companies.

Presented on the Table 1 below, asset misappropriation, bribery and corruption, customer fraud and cybercrime listed as top four most troublesome occurrences of fraud experienced by Malaysian organisation reported by PwC Malaysia. Asset misappropriation and customer fraud slightly decrease cases were reported by PwC from 2014 until 2020. Asset misappropriation informed as 65% cases in 2014, reduced to 57% in 2016, 41% reported cases in 2018 and shrunk to 31% in 2020. The decrease in number of cases also were shown in customer fraud which recorded 31% in 2018, diminished to 24% in 2020, however, no available data given by PwC for 2014 and 2016. Different pattern of number of cases was presented by bribery and corruption and cybercrime as these fraud incidents recorded increasing number of fraud occurrences. Bribery and corruption reported 19% in 2014, increased to 30% in 2016 and bigger the number to 35% in 2018 and 2020. The same finding was shown by cybercrime fraud which slightly increased from 22% in 2018 to 24% in 2020. Increase in the cybercrime fraud in Malaysia also had been reported by few media and regulators.

Table 1: PwC's Global Economic Crime and Fraud Survey from 2014 to 2020

Fraud Incidents	2014	2016	2018	2020
	(%)	(%)	(%)	(%)
Asset Misappropriation	65	57	41	31
Bribery and Corruption	19	30	35	35
Customer Fraud	n/a	n/a	31	24
Cybercrime	31	30	22	34

Source: PwC's Global Economic Crime and Fraud Survey from 2014 to 2020 (Malaysia Report)

Considering that the PWC fraud survey is conducted every two years, the next report will be in 2022. For the meantime, comprehensive and systematic study of financial crimes committed during the Covid-19 pandemic have not been thoroughly studied. This paper analyses the newest update in Malaysia, Tariq (2021) on The Star reported that a total of 4,615 cyberattacks were reported to Cybersecurity Malaysia between January and May 2021, nearly 5,000 cases were reported to the national cybersecurity agency (CSM). These incidents were categorised as fraud (3,299), intrusion (765) and malicious code (256) said Communications and Multimedia Minister Datuk Saifuddin Abdullah. Compared to the previous year 2020, the cybercrime cases tremendously increased. Accordingly, Ali (2020) reported a rise of 42% (4,596 cases) in cybercrime cases as of April 2020 post-covid-19 in Malaysia.

Having said that, a contradictory pattern was identified in the physical crime. Commissioner Datuk Huzir Mohamed, director of the Federal CID, said that from March 18, 2020 to April 15, 2021, 39,726 cases were recorded. There has been a 32% drop since the first movement control order went into effect in March 2020. "In the meantime, 54,920 cases were reported in the 394 days before the MCO was implemented (February 18, 2019 to March 17, 2020). A reduction of 18,644 cases or 32.2 % is shown drop in number of cases" (CAMOENS, 2021). As a result, movement control order (MCO) has proven to be a valuable instrument in the fight against crime. Covid-19's impact on financial crime patterns is therefore more favourable to physical crime rather than cybercrime. It was clearly revealed that crimes pattern in Malaysia is keep rising especially when the distress condition took place.

Crimes and Fraud in Banking Sector

Banking institutions around the world are being targeted by increasingly sophisticated fraud schemes, which continue to syphon billions of dollars from lenders every year. That's not to say that banks aren't doing everything they can to protect their customers and institutions from fraudulent activity. It is still possible to catch criminals, and stolen funds are still being recouped. According to the International Banker, it was clearly proved that banks are clearly using some of the latest technology to combat scams (Manning, 2021).

Report to the Nation's 2020 Global Study on the Occupational Fraud and Abuse by Association of Certified Fraud Examiners (ACFE) found that banking and financial services, government and public administration, and manufacturing were the most common industries involved with fraud. With a loss of USD 475,000, the mining industry had the highest median loss, while frauds in the energy sector came in second with a loss of USD 275,000 on average (ACFE, 2020). On top of that, PwC's Global Economic Crime and Fraud Survey came to the same conclusion, finding that financial services being the most affected industry causes by fraud (PWC, 2020). From the survey reports, it is important to recognise that banking services are highly exposed to fraud.

Besides being an important part of the economy, banks will have a significant impact on the economy's recovery after the Covid-19 pandemic. Since they facilitate both domestic and international trade, banks play a crucial role in the economy. This is the main reason for the fraudster to target banking institutions as the proper medium for them to commit frauds. In this time of crisis, banks play a crucial role in helping the community manage with the pandemic by providing financial assistance to the government, small, medium and large businesses, and individuals. Companies, individuals, and other organisations will be more resilient if the banks can adapt to the COVID-19 pandemic's challenges. This depends on banks' resilience and financial health. Defaults on loans and riskier assets will deplete banks' capital (McKinsey & Company, 2020).

The Malaysian financial system is made up of two components namely the financial intermediaries and the financial markets. Bank Negara Malaysia (BNM) and the banking industry consisting of banks, Islamic banks and investment bank's structure the banking system (Aimi Bt et al., 2017). From Malaysia perspective, The Star reported that, the number of bank scams targeting mobile users is on the rise, according to cybersecurity firm. This is because in the wake of the Covid-19 pandemic, customers are increasingly turning to their smartphones for banking transactions (Tariq, 2021). Additionally, similar finding reported by New Straits Times which discover that Malaysians have lost RM2.23 billion to cybercrime frauds. A total of 67,552 cybercrime cases were reported to the police between 2017 and June 20 of this year, according to police statistics. There were 23,011 cases of e-commerce fraud, followed by illegal loans, 21,008 cases and investment fraud with 6,273 cases (Basyir, 2021).

According to a global technology specialist (GBG), Malaysian financial institutions face a variety of fraud management challenges. Report focusses on Malaysian financial institutions, GBG found that 47% considered fraud checks of new customers during the onboarding process to be the most challenging phase for fraud detection and prevention in Malaysia. In the Ringgit Plus web reported, according to a further 33%, the most difficult phase is verifying the identity of new customers in order to open a bank account for them. The authentication and validation of existing customers for online services is considered by 16%, and the monitoring of transactions and payments is considered by 4%. Additionally, according to GBG's report, fraud, including social engineering, first party fraud, cyber-attacks, and anti-money laundering, is expected to rise in 2020-21. 54% of Malaysian financial institutions expect a rise of scams whereas 51% assume additional theft in ID cases. RM49.9 million (1,001 cases) throughout Macau scams, RM18.3 million (1,582 cases) of non-existent loans, and RM17 million (2,500 cases) of e-commerce fraud have been reported since the implementation of MCO (Yin, 2020).

As been reported by PWC Malaysia, huge losses had been reported as for the consequences of fraud and economic crime. The amount was increased tremendously, 13% lost more than USD 1 million in 2016, increased to 22% in 2018, and in 2020, it has been reported that approximately US\$42billion losses in the last 24 months. From the analysis, the riskiest industry reported was financial services (PWC,2020a). From the disclosure, it is notice that the banking institutions in Malaysia is in the critical condition from being the opponent of fraudster. This is said so due to the statistics reported on the risen of fraud cases occur in this industry.

Research Methodology

Studies on financial crime contextualization are becoming more prevalent. The impact of Covid-19 on financial crime and the banking sector will be examined through contextualization, leading to a greater comprehension of their interconnectedness. While some researchers (Toheri et al., 2020) argue that contextualization can lead to an unduly fragmented field and potential collapse, many others think it offers a better knowledge of the larger picture.

The ongoing implications of COVID-19 has been contextualised with regard to the potential for financial crime in this conceptual study. The gathered data was subjected to content analysis, which reviewed a wide range of publications about Covid-19, possible opportunities for financial crime, the pattern of financial crime during Covid-19, and the trends in fraud and crime in the banking industry. In order to conduct this analysis, the text must be carefully examined utilising summarization techniques, and pertinent information must be scientifically extracted (Neuendorf, 2001).

Results and Findings

Overtone of Covid-19: Impact to the Worldwide Banking Sector

An unprecedented disruption to the global economy and world trade has resulted from COVID-19 pandemic. Because of COVID-19's pandemic-induced economic crisis, it appears to be disproportionately impacted, just as it was during 2007 financial breakdown. There are many ways the banking sector has been affected by the Covid-19 crisis, but the media tends to focus on just a few impacts. From the banking perspectives, Covid-19 could have few implications to this industry. According to the finding by (Barua & Barua, 2021), they found that the impact of Covid-19 could be portrayed in three dimensions such as firm value (risk-weighted asset value), capital adequacy, and operating performance (interest incomes) of banks, under different NPL shock scenarios.

The other noticeable effect of COVID-19 on banking sector has been highlight by KPMG in Nigeria on the report of The Twin Shocks (Covid-19 Pandemic & Oil Price War) and Implications for the Banking Sector. First, digital banking. Bank needs to use digital transformation programmes because this is the primary options to the clients. Fraudsters are becoming more sophisticated and taking advantage on this digital banking programme. Secondly, credit risks, liquidity risk, market risk, operational risk, cyber risk, currency risk and profitability and capital adequacy will also be affected. Lastly, from the perspective of audit, financial reporting. Fiscal policy, currency adjustment, administrative concessions, employee benefits, going concern, reporting, fair value measurements and insurances recoveries will be affected (KPMG, 2020).

According to Beck (2020), Covid-19 give huge impact on the banking sector. This includes the dilemma of the non-performing loan will be hinger due to the unable of firm to repay back their borrowing. Bond and other financial instruments would be negatively affected thus will result further losses to the bank. Banking institutions also will experience increasing demand for credit because organisations require more additional cash to survived. Lastly, banking sector also will be facing issue of lower non-interest revenue. Same implication found out in the Deloitte Insight report on Covid-19 potential implications for the banking and capital markets sector by (Baret et al., 2020) which highlight that operational resilience, financial and

business implications and risk and controls would be the implication from this pandemic Covid-19.

Similarly, Wronka (2021) found out that there is huge implication of this pandemic to the banking institutions. Firstly, increase the cases of cyber fraud. Payment systems and online wallets may have existed prior to COVID-19, but they were extremely rare. Secondly, increased obscurity of criminal activities. One of the most notable examples of this has been the conversion of assets into a form that is less traceable and transparent. Next impact would be imposter scam. As a result of Covid-19, people will be in a state of fright. Scammers can take advantage of people's fear by impersonating individuals and organisations such as health care providers, international relief organisations or government agencies. The researcher also found the implication in such ways like there are increase in the cybercrime and cryptocurrency threats, increase money laundering activities, and insider trading will also be affected.

Over and above that, another research conduct by previous researcher on the impact of pandemic Covid-19 in the banking sector found that Covid-19 pandemic could impact the technology innovation and digitalization, security, mobile banking, transformation of banking system, performance of banking system, and economic impact (Roxana MARCU, 2021).

Overtone of Covid-19: Impact to the Malaysian Banking Sector

As a result of the financial crisis, banks played a crucial role in providing cash flow assistance to those in need. All Malaysian banks will be granted a six-month automatic moratorium on loan or financing repayments from 1 April 2020 as part of the government's agreement with the Central Bank of Malaysia (BNM) to reduce the negative economic impacts of the pandemic (Jing, 2020). This pandemic will have devastating effects on both the macroeconomy of Malaysia as well as the economic well-being of the rakyat in the country as a whole.

According to the Economics, Trade & Regional Integration analyst, this Covid-19 could have a devastating impact on Malaysia. This has been demonstrated by Malaysian statistics show that 67.8% of companies or business firms had no source of revenue during the MCO period. On the other hand, only 9.8% of on-premises sales were made in a physical shop whilst 12.3% through online sales or services (Department of Statistics Malaysia, 2020). Towards the Malaysia's economy, Malaysian businesses are suffering from two main sources of economic damage. The first economic damage comes from the ripple effect of the coronavirus's impact on other countries, while the second comes from restrictions on movement imposed by the government (Calvin Cheng, 2020).

From the Malaysia's banking perspectives, as per report produced by Deloitte on the COVID 19: Impact on Financial Institutions and How to Respond, they found that financial institutions' capital could be adversely affected in the event that the global economy goes into recession for an extended period of time, as their profitability and asset quality declines. First, Covid-19 impact to banking sector in terms of the Deferment and Restructuring on loans/financing repayment and drawdown of capital conservation buffer. Lending restrictions (loan moratorium) would help financial institutions deal with the possibility of declining profitability and asset quality. Secondly, banking institution need to operate below the minimum requirement Liquidity Coverage Ratio (LCR) of 100% and lower Non-Stable Funding Ratio (NSFR) to 80%. Lastly, banking institutions need to ensure proper forward-

looking information is incorporated for MFRS 9 provision to reflect the current economic conditions (Deloitte, 2020). These consequences will indirectly open the opportunity of financial crime to be increasing if the banking institutions ignorant to this implications.

On top of that, researcher found that banks in Malaysia have a difficult time selling their products and providing services to customers, which is the first marketing challenge they face. There are economic downturns and lower GDP growth when COVID-19 is present. Thus, the demand for banking products will be reduced. Secondly, due to this unforeseen issue, Bank Negara Malaysia (BNM) has reduced interest rates aggressively, affecting the banks' interest income. Banks, on the other hand, will lose deposits as a result of the low interest rate. Next, the promotion of bank brands is a challenge that banks face in their marketing efforts. Credit card offers, bank loans, investment and insurance products are traditionally advertised on billboards along highways, in newspapers, or on brochures and flyers. However, this was no longer applicable since people do not go out as much during the MCO because the government enforces strict rules that force Malaysian citizens to stay at home and travel between states is prohibited. Lastly, regarding the place for distribution channel (Shean, 2020).

Other study like Abu Bakar & Rosbi, (2021) highlight that Covid-19 out brakes give negative effect to the development of the economy. Moreover, the KLCI market was affected because it experienced the negative effects that slowed down all the economic activities. Additionally, the negative value of the share price for CIMB, Maybank and Public Bank Berhad indicate that this Covid-19 significantly impact to these banks. There are increased financial and operational pressures across many companies and industries as a result of the current COVID-19 pandemic outbreak. The COVID-19 pandemic has had a devastating impact on almost every organisation, firm, and industry.

Globally, organisations have become more vulnerable to the COVID-19 epidemic. As a result of COVID-19's need to secure new business, there is a greater risk of organisations falling foul of S17A, which could lead to an upsurge in bribe payments. Deloitte Malaysia discovered that fraud and corruption are among the issues that need to be addressed. Because of that, individuals are more likely to engage in illegal activities to relieve these pressures or protect their financial futures (Deloitte, 2020b). Even though government had given lot of incentive, but still the opportunity to commit financial crime is higher because individual as well as an organisation emphasis on protecting their employee and business operations in order for them to survived. Banking institutions thus will be in a higher risk because they will become a target for this group of peoples. The loophole for the financial crime is there.

From the above findings, it is important for the banking sector through all over countries and in Malaysia to be aware on the crime in this sector which was found to be increase especially during this pandemic Covid-19 crisis. Banking organisation must always alert on the early sign of the red flags, and they must take quick effective precaution to avoid the financial crime to spread widely in their organisation. On the other hand, regulator especially need to be more focus on the strategy that need to be implemented for the banking sector in order for them to stand firm and successfully handle this crisis.

Conclusion

COVID-19: How banks can survive and thrive

As a result of the COVID-19 crisis, banking sector have successfully navigated the immediate COVID-19 crisis pressures. As the focus shifts to the future, a strong banking sector will be required for a strong recovery to take place. After implementing initial crisis measures in response to the COVID-19 pandemic, banking institutions are starting to reflect at the lessons on what they've learned (PWC, 2023). A few commendations were proposed by Big-Four companies as well as the regulators to tackle this pandemic Covid-19 issues for the banking sector. Supplementarily, Steenkamp (2021) on the EY report highlights that policies and controls should be re-examined in a disruptive environment. More effective fraud-fighting efforts will strengthen defenses against future crises in order for the banking sector to combat financial crime in the industry.

Furthermore, for the reason that this financial crime which keep on rising especially during this pandemic, banks must continue to monitor and report suspicious transactions, despite the fact that some oversight, reporting deadlines and due diligence have been relaxed. It is important for banks to ensure that government assistance and stimulus packages are delivered quickly and efficiently to those who need them, but doing so while remaining vigilant against crime is not always easy to do successfully. The use of digital tools, in particular data analytics, needs to be accelerated in order to detect suspicious activity in the system (Bedford, 2020).

According to the PWC report on the Ready and resilient: Retail banking strategy for a COVID-19 world, recommended four approaches to redesign the bank for the future. First, reconfigure bank operating model. Secondly, to rebuilt bank revenue growth engine. This can be done by segmenting the potential customers to understanding how their financial needs have changed, and how the financial crisis may have affected their behaviour. Thirdly, is to redesign bank risk management. Lastly, to reinforce bank purpose, culture and talent. It is also crucial to comprehensible how the organization's drive, mission and values attach to business results, and how they can help society at large by accomplishing those outcomes (PWC, 2020).

On top of that, KPMG suggested few corrective measures in their Blog on Financial Services: Five priorities post COVID-19 to managed the Covid-19 issues. First, the banking sector need to have the productivity enhancement and technology enablement. Second steps to reconnecting with the customers. Thirdly is to producing vibrant ecosystems and partnerships. Due to the constant evolution of business models and market dynamics, banking institution are collaborating with non-traditional partners to create new value propositions for customers. Next action is to surrounding social responsibility and purpose. Environmental, social, and governance concerns are becoming increasingly important as markets and economies look to recover. Lastly, to improve risk management and agility. Some of the world's largest financial services companies have already begun improving their ability to handle sudden shocks and unexpected risks in the future (Liddy, 2020). All of these corrective actions need to be emphasis in order for the banking sector to reduce the fraud activities from happen in their institutions.

By the same token as other Big-Four companies, EY on the report of how banks can successfully emerge from COVID-19, suggested that it is imperative that banks look beyond

the pandemic and use this crisis as a springboard to reimagine their role in the new reality that awaits them. They were highlight three main propositions for the banking sectors to attempt with this pandemic problem. First, because of the COVID-19 crisis, banks must remain focused on the needs of customers to help them recover. Next approach, banking sector must also adapt their operating models in order to improve efficiency and adaptability. Finally, the economic changes should be reflected in the risk management thresholds as well as a greater focus on difficult-to-serve customer segments (Bellens, 2020). The main reason why banking institutions need to keep focusing on their customer is because they need to know well their customers as per KYC key elements for the banking institutions to easily detect fraud opportunity, thus decreasing the chances of the fraud to exist.

In Malaysia, MCO's effects and consequences of the COVID-19 pandemic will likely last well beyond the MCO period. For this reason, banking institutions should take into account important macroeconomic parameters such as unemployment, interest rates and inflation as well as the short- and long-term economic outlook in order to design more comprehensive financial assistance continuity plans after COVID-19 to avoid the high fraud incidences especially in the banking sector itself. As a result of this, Bank Negara Malaysia and Malaysia's financial industry are committed to helping individuals and viable businesses who have been adversely affected by the COVID-19 pandemic, to support economic recovery and protect Malaysians' livelihoods.

Out of all of this, banks should re-evaluate their balance sheet challenges such as monitoring deposit fluctuations, looking for refinancing opportunities, raising new capital at attractive rates, and revising their planned capital actions (Jing, 2020). If the bank wants to remain competitive and controlling the fraud activities, it must adapt its business models based on new customer norms. All in all, these actions would complement the government's strategy to assist vulnerable communities in the event of a future crisis.

From the Malaysian banking institution perspectives, in addition to COVID-19, financial institutions are being pushed to improve their fraud detection framework by a changing economic environment as well as the rapid adoption of internet and mobile banking channels, as well as the continued focus of regulators. Earlier this year, Bank Negara Malaysia (BNM) updated its Risk Management in Technology (RMiT) policy in an effort to guide Malaysian financial institutions in combating cybercrime. An automated fraud detection system that uses heuristic behavioural analytics is specifically mentioned in this policy (Deloitte, 2020a). Despite the challenges of managing and responding to the pandemic, we continued to make progress in the financial sector in 2020. Financial services were digitalised faster, financial markets were deepened, access to finance was improved and more people were financially included, and financial resilience was built. Since the Bank is aware of this, it is working on adapting its regulations in order for the financial institutions involved to effectively manage the risks associated surrounded by this industry (BNM, 2020).

Future Implications and suggestions

Consumers in today's rapidly changing world demand convenience and speed in every aspect of their lives. Criminals, on the other hand, are more sophisticated than ever before, and they are constantly refining their approaches to take benefit of any shortcomings. Financial crime encompasses a wide range of illegal practices such as corruption, cybercrime, fraud, bribery, drug trafficking and etc. All of these illegal activities will continue to take place. It is a global problem that poses a threat to the safety and soundness of the financial system in the banking

industry. As a result of financial crime, the bank's brand and reputation can be seriously harmed for a long time.

Having said that, this study focused on the implication of the pandemic Covid-19 to the banking sector as well as the strategies being used for both banking institutions and also regulators in Malaysia to react toward this recent crisis. As a result of Covid-19, the global social and economic situation has deteriorated considerably (Farhan Bashir et al., 2020). Similarly, Basit (2020) indicates that Covid-19's impact on the socio-economic system underscores the fragility of international cooperation in the fight against international economic crime. We can at least prevent to some extent the devastating effects of this pandemic from negatively impacting the socio-economic conditions if all the banking sectors and regulators enacted an effective control mechanism, aided by public awareness on the financial crime as well as the mutual support of private and public institutions.

Covid-19 initiatives have been announced as part of the continuing initiatives to tackle the economic difficulties caused by lockdown restrictions. New support initiatives have been introduced as well as changes to existing packages. This support aid includes PEMERKASA Plus economic stimulus package, Prihatin Special Grant, PERKESO Wage Subsidy Scheme (PSU), Moratorium package by BNM, and many more. Since then, Malaysian authorities have announced an Economic Stimulation Package, PRIHATIN Package, Additional PRIHATIN Package and National Economic Recovery Plan, as well as the kit "prihatin" packages totaling respectively, RM20billion, RM230billion, 10 billion and 35 billion, and 10 billion, respectively, in order to prepare for COVID-19 (KMPG, 2020a).

As a result of the many initiatives taken by the Malaysian Government and Bank Negara Malaysia (BNM) to combat this pandemic, it is expected that Malaysia's socio-economic situation will improve in the near future. Due to the pressure brought on by the pandemic Covid-19, this could help to minimise the financial crime rate. As a matter of fact, in what ways do individuals and businesses go to great lengths to take advantage of the opportunities and advantages provided? As a result of this study, all companies and banking institutions in Malaysia should invest more to figure out the best corrective plan to reduce financial crime in their organisation. Whilst, Malaysia's government funding must be used to support business continuity, so they must stay informed and take advantage of the opportunities.

In order to combat financial crime from the perspective of the legal department at banking institutions, the importance of risk management compliance must be highlighted first. Compliance risk management is the practise of identifying and analysing potential risks in advance and taking preventative measures to reduce or curtail the risk (Kelly, 2019). As a result of the overwhelming nature of understanding the external and internal compliance obligations and the associated risks, it is critical for the banking industry to establish a process that will give the organisation way to effectively managing the compliance and steering clear of potential liabilities. So as to ensure an integrated system with optimal technology used in the company, all parties involved must work together and put forward by their best efforts. When it comes to fighting financial crime, especially during this pandemic Covid-19, the banking industry must have adequate knowledge and high competency in risk management, as well as a thorough evaluation of the customer's risk, alongside with a strengthening of internal company policies and procedures to ensure compliance are fulfilled.

References

- Abdi Kulmie, D., Mohamud Dahir Hilif, & Sheikh Hussein, M. (2023). Socioeconomic Consequences of Corruption and Financial Crimes [Review of Socioeconomic Consequences of Corruption and Financial Crimes]. *International Journal of Economics and Financial Issues*, 13(5), 88–95. <https://doi.org/10.32479/ijefi.14714>
- Abu Bakar, N., & Rosbi, S. (2021). Effect of COVID-19 outbreak towards banking and finance industry. *International Journal of Advanced Engineering, Management and Science (IJAEMS)*, 7(3), 2454–1311. <https://doi.org/10.22161/ijaems>
- ACCA. (2021). *What is financial crime and what do financial crime risk professionals do?* Retrieved from accaglobal.com: <https://www.accaglobal.com/an/en/qualifications/why-acca/competency-framework/job-profiles/compliance-and-risk/risk-financial-crime.html> (accessed 3 September 2021)
- ACFE. (2020). *2020-Report-to-the-Nations*.
- ACFE, (2023) Combatting business-to-business fraud: Benchmarking report. *Combatting Business-To-Business Fraud*. <https://www.acfe.com/fraud-resources/combating-b2b-fraud-report>
- Aimi Bt, N., Puad, M., Bt, N., Rafdi, J., Shah, W. S., & Shahar, B. T. (2017). *A Review on Development Financial Institutions in Malaysia*.
- Ali, F. A. (2020, December 16). *Organisasi perlu siap siaga tangani ancaman jenayah siber*. Retrieved from [bharian.com.my](https://www.bharian.com.my): <https://www.bharian.com.my/kolumnis/2020/12/765520/organisasi-perlu-siap-siaga-tangani-ancaman-jenayah-siber> (accessed 13 September 2021)
- Barua, B., & Barua, S. (2021). COVID-19 implications for banks: evidence from an emerging economy. *SN Business & Economics*, 1(1). <https://doi.org/10.1007/s43546-020-00013-w>
- Baret, S., Celner, A., O'reilly, M., & Shilling, M. (2020). *COVID-19 potential implications for the banking and capital markets sector Maintaining business and operational resilience*.
- Basit, A. (2020). COVID-19: a challenge or opportunity for terrorist groups? *Journal of Policing, Intelligence and Counter Terrorism*, 15(3), 263–275. <https://doi.org/10.1080/18335330.2020.1828603>
- Basyir, M. (2021, July 16). *Malaysians suffered RM2.23 billion losses from cyber-crime frauds*. Retrieved from [nst.com.my](https://www.nst.com.my): <https://www.nst.com.my/news/crime-courts/2021/07/708911/malaysians-suffered-rm223-billion-losses-cyber-crime-frauds> (accessed 10 September 2021)
- Beck, T. (2020, August 13). *How is coronavirus affecting the banking sector?* Retrieved from [economiscobservatory.com](https://www.economicsobservatory.com): <https://www.economicsobservatory.com/how-coronavirus-affecting-banking-sector> (accessed 14 September 2021)
- Bedford, D. (2020, July 16). *COVID-19 pandemic: How banks can increase resilience against financial crime*. Retrieved from [ey.com](https://www.ey.com): https://www.ey.com/en_my/managed-services/covid-19-pandemic-how-banks-can-increase-resilience-against-financial-crime
- Bellens, J. (2020, August 7). *How banks can successfully emerge from COVID-19*. Retrieved from [ey.com](https://www.ey.com): https://www.ey.com/en_my/banking-capital-markets/how-banks-can-successfully-emerge-from-covid-19 (accessed 6 September 2021)
- BNM. (2020). *Measures to Address COVID-19 Impact*. Retrieved from [bnm.gov.my](https://www.bnm.gov.my): <https://www.bnm.gov.my/covid19> (accessed 7 September 2021)
- BNM. (2020a). *Promoting Monetary Stability Our Role*.
- Calvin Cheng. (2020). *Key takeaways*.
- Chamola, V., Hassija, V., Gupta, V., & Guizani, M. (2020). A Comprehensive Review of the COVID-19 Pandemic and the Role of IoT, Drones, AI, Blockchain, and 5G in Managing

- its Impact. *IEEE Access*, 8, 90225–90265.
<https://doi.org/10.1109/ACCESS.2020.2992341>
- Camoens, A. (2021, May 3). *Bukit Aman: Since the start of MCO, crime cases have dropped by 32%*. Retrieved from thestar.com.my: <https://www.thestar.com.my/news/nation/2021/05/03/bukit-aman-since-the-start-of-mco-crime-cases-have-dropped-by-32>
- CDC. (2021, May 24). *cdc.gov (Centers for Disease Control and Prevention)*. Retrieved from COVID-19: <https://www.cdc.gov/coronavirus/2019-ncov/your-health/about-covid-19/basics-covid-19.html>
- Crisanto, J. C., & Prenio, J. (2020). *FSI Briefs No 7 Financial crime in times of Covid-19-AML and cyber resilience measures*. www.bis.org/emailalerts.htm.
- Deloitte. (2020). *my-risk-covid-19-impact-my-financial-institutions (2)*. *Deloitte*.
- Deloitte. (2020a, October 15). *Fraud prevention solutions for financial institutions*. Retrieved from Deloitte.com: <https://www2.deloitte.com/my/en/pages/risk/articles/fraud-prevention-solutions-for-financial-institutions.html> (accessed 13 September 2021)
- Deloitte. (2020b). *COVID-19 Operating in the 'new normal' – A backdoor to increased fraud risk?*. Retrieved from [www2.deloitte.com: https://www2.deloitte.com/ch/en/pages/financial-advisory/articles/covid-19-operating-in-the-new-normal-fraud-risk.html](https://www2.deloitte.com/ch/en/pages/financial-advisory/articles/covid-19-operating-in-the-new-normal-fraud-risk.html) (accessed 14 September 2021)
- Dorris, B. (2020). *Coronavirus Pandemic Is a Perfect Storm for Fraud*. Retrieved from acfe.com: <https://www.acfe.com/press-release.aspx?id=4295010491> (accessed 13 September 2021)
- Ekberg, M. L., & Affairs, R. (2020). *Financial crime risk management and the COVID-19 Pandemic: Issues for closer international cooperation and coordination*. <http://www.fatf-gafi.org/publications/fatfgeneral/documents/statement-covid-19.html>
- Europol. (2020). *Economic Crime*. Retrieved from [europol.europol.eu: https://www.europol.europa.eu/crime-areas-and-trends/crime-areas/economic-crime](https://www.europol.europa.eu/crime-areas-and-trends/crime-areas/economic-crime) (accessed 3 September 2021)
- Farhan Bashir, M., Ma, B., & Shahzad, L. (2020). A brief review of socio-economic and environmental impact of Covid-19. *Air Quality, Atmosphere & Health*, 1403–1409. <https://doi.org/10.1007/s11869-020-00894-8>/Published
- Felman, A. (2021, 01 31). What to know about coronaviruses. Retrieved from [medicalnewstoday.com: https://www.medicalnewstoday.com/articles/256521](https://www.medicalnewstoday.com/articles/256521) (accessed 6 September 2021)
- Gottschalk, P. (2010). Categories of financial crime. *Journal of Financial Crime*, 17(4), 441–458. <https://doi.org/10.1108/13590791011082797>
- Ibn-Mohammed, T., Mustapha, K. B., Godsell, J., Adamu, Z., Babatunde, K. A., Akintade, D. D., Acquaye, A., Fujii, H., Ndiaye, M. M., Yamoah, F. A., & Koh, S. C. L. (2020). *A critical analysis of the impacts of COVID-19 on the global economy and ecosystems and opportunities for circular economy strategies Circular economy Sustainability Sustainable development Supply chain resilience Climate change*. <https://doi.org/10.1016/j.resconrec.2020.105169>
- ICA. (2021). *What is Financial Crime ? ICA*. Retrieved from [int-comp.org: https://www.int-comp.org/careers/your-career-in-financial-crime-prevention/what-is-financial-crime/](https://www.int-comp.org/careers/your-career-in-financial-crime-prevention/what-is-financial-crime/) (accessed 3 September 2021)
- Insider, L. (2020). *Financial Crime Definition*. Retrieved from [lawinsider.com: https://www.lawinsider.com/dictionary/financial-crime](https://www.lawinsider.com/dictionary/financial-crime) (accessed 3 September 2021)
- Jing, Y. K. (2020, August 19). *Roles and challenges of banks during the pandemic*. Retrieved from [swinburne.edu.my: https://www.swinburne.edu.my/campus-beyond/roles-challenges-banks-pandemic.php](https://www.swinburne.edu.my/campus-beyond/roles-challenges-banks-pandemic.php) (accessed 7 September 2021)

- Kelly, M. (2019, April 16). *What Is Compliance Risk Management?* Retrieved from ganintegrity.com: <https://economictimes.indiatimes.com/definition/risk-management> (accessed 8 September 2021)
- KPMG. (2020). *Impact of COVID-19 on the Banking Sector*.
- KPMG. (2020a, December 2). *Malaysia*. Retrieved from home.kpmg: <https://home.kpmg/xx/en/home/insights/2020/04/malaysia-government-and-institution-measures-in-response-to-covid.html> (accessed 8 September 2021)
- KPMG. (2020b). *Global banking M&A outlook H2 2020 Standing firm on shifting sands. Letter to the Editor Effects of COVID-19 pandemic in daily life*. (2020). <https://doi.org/10.1016/j.cmrp.2020.03.011>
- Liana W. Rosen. (2020). *CRS INSIGHT Prepared for Members and Committees of Congress COVID-19 and Emerging Global Patterns of Financial Crime*. <https://crsreports.congress.gov>
- Liddy, J. (2020, June 10). *Financial Services: Five priorities post COVID-19*. Retrieved from home.kpmg: <https://home.kpmg/xx/en/blogs/home/posts/2020/06/financial-service-priorities-post-covid-19.html> (accessed 6 September 2021)
- Manning, J. (2021, May 28). *ARE BANKS LOSING THE FIGHT AGAINST FRAUD?* Retrieved from internationalbanker.com: <https://internationalbanker.com/banking/are-banks-losing-the-fight-against-fraud/> (accessed 10 September 2021)
- McKinsey & Company. (2020). *Banking and Risk Practices Banking system resilience in the time of COVID-19*.
- Neuendorf, K.A. (2001). *The Content Analysis Guidebook*.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). *The socio-economic implications of the coronavirus pandemic (COVID-19): A review*. <https://doi.org/10.1016/j.ijssu.2020.04.018>
- OECD. (2021). *OECD Economic Outlook, Volume 2021 Issue 1*. OECD. <https://doi.org/10.1787/edfbca02-en>
- OECD. (2023). *International trade during the COVID-19 pandemic: Big shifts and ... - OECD. OECD Policy Responses to Coronavirus (COVID-19) International trade during the COVID-19 pandemic: Big shifts and uncertainty*. <https://www.oecd.org/coronavirus/policy-responses/international-trade-during-the-covid-19-pandemic-big-shifts-and-uncertainty-d1131663/>
- PWC. (2020). *Fighting fraud: A never-ending battle PwC's Global Economic Crime and Fraud Survey 2 0 2 0*. www.pwc.com/fraudsurvey
- PWC. (2020b). *How Malaysian banks can keep the lights on-and recalibrate for the future*. www.pwc.com/my
- PWC. (2020c). *Fraud and corruption Malaysia has its say PwC's Global Economic Crime and Fraud Survey-Malaysia Report*. www.pwc.com/my
- PWC. (2020, June). *Ready and resilient: Retail banking strategy for a COVID-19 world*. Retrieved from pwc.com. (accessed 6 September 2021)
- PWC. (2021). *COVID-19: The potential of increased fraud and economic crime*. Retrieved from pwc.com: <https://www.pwc.com/gx/en/issues/crisis-solutions/covid-19/increased-fraud-economic-crime.html> (accessed 13 September 2021)
- PWC. (2022). *PWC Global Economic Crime and Fraud Survey 2022: The Rise of External Fraud [Review of PWC Global Economic Crime and Fraud Survey 2022: The Rise of External Fraud]*. In PWC (Ed.), *PWC*. <https://www.pwc.com/gx/en/forensics/gecsm-2022/pdf/PwC%E2%80%99s-Global-Economic-Crime-and-Fraud-Survey-2022.pdf>

- Rebovich, D. (2021). *Victims & Offenders The Changing Face of Financial Crime: New Technologies, New Offenders, New Victims, and New Strategies for Prevention and Control*. <https://doi.org/10.1080/15564886.2021.1876196>
- Roxana Marcu, M. (2021). The Impact of the COVID-19 Pandemic on the Banking Sector. *Management Dynamics in the Knowledge Economy*, 9(2), 205–223. <https://doi.org/10.2478/mdke-2021-0013>
- Shabir M, Jiang P, Wang W, Işık Ö. COVID-19 pandemic impact on banking sector: A cross-country analysis. *Journal of Multinational Financial Management*. 2023 Mar; 67:100784. doi: 10.1016/j.mulfin.2023.100784. Epub 2023 Feb 3. PMID: PMC9896081.
- Sanusi, Z. M., Rameli, M. N. F., & Isa, Y. M. (2015). Fraud Schemes in the Banking Institutions: Prevention Measures to Avoid Severe Financial Loss. *Procedia Economics and Finance*, 28, 107–113. [https://doi.org/10.1016/s2212-5671\(15\)01088-6](https://doi.org/10.1016/s2212-5671(15)01088-6)
- Shean, K. S. (2020). *Covid-19 And Malaysian Banking Industry: Problems Faced By Bank Marketing And Strategies To Promote Services And Bank Brands*. <https://www2.deloitte.com/cn/en/pages/financial-services/articles/banking-and-capital-markets-impact-covid->
- Stenkamp, B. (2021, April 5). *Why COVID-19 made fraud and compliance a bigger issue*. Retrieved from ey.com: https://www.ey.com/en_my/assurance/why-covid-19-made-fraud-and-compliance-a-bigger-issue (accessed 13 September 2021)
- Szmigiera, M. (2021, August 3). Impact of the coronavirus pandemic on the global economy - Statistics & Facts. Retrieved from statista.com: <https://www.statista.com/topics/6139/covid-19-impact-on-the-global-economy/>
- Tariq, Q. (2021, April 24). *Bank scams increasingly targeting mobile users, says cybersecurity firm*. Retrieved from thestar.com.my: <https://www.thestar.com.my/tech/tech-news/2021/04/27/bank-scams-increasingly-targeting-mobile-users-says-cybersecurity-firm> (accessed 10 September 2021)
- Toheri, T., Winarso, W., & Haqq, A. A. (2020). Where exactly for enhance critical and creative thinking: the use of problem posing or contextual learning. *European Journal of Educational Research*, 9(2), 877–887. <https://doi.org/10.12973/eu-jer.9.2.877>
- Undesa. (2021). *Everyone Included: Social Impact of COVID-19*. Retrieved from United Nations: <https://www.un.org/development/desa/dspd/everyone-included-covid-19.html>
- WHO. (2023, October 18). *Who coronavirus (COVID-19) dashboard*. World Health Organization. <https://covid19.who.int/>
- Wise, J. (2020). Covid-19: Pandemic exposes inequalities in global food systems. *BMJ (Clinical Research Ed.)*, 369, m1915. <https://doi.org/10.1136/bmj.m1915>
- Wronka, C. (2021). Impact of COVID-19 on financial institutions: Navigating the global emerging patterns of financial crime. *Journal of Financial Crime, ahead-of-print(ahead-of-print)*. <https://doi.org/10.1108/JFC-03-2021-0073>
- Yin, A. C. (2020, October 15). *GBG: Malaysian Financial Institutions Face Fraud Management Challenges In Spurring Digital Growth*. Retrieved from ringgitplus.com: <https://ringgitplus.com/en/blog/banking/gbg-malaysian-financial-institutions-face-fraud-management-challenges-in-spurring-digital-growth.html> (accessed 10 September 2021)